A GRADIOMETER-BASED FLUX QUBIT FOR QUANTUM COMPUTING AND METHOD THEREFOR

ABSTRACT

A qubit (quantum bit) circuit includes a superconducting main loop that is electrically-completed by a serially-interconnected superconducting subloop. The subloop includes two Josephson junctions. A first coil provides a first flux that couples with the main loop but not with the subloop. A second coil provides a second flux that couples with the subloop but not with the main loop.

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